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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,167	10/17/2003	Mark Ammirati	PC23031A	9555

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PFIZER INC.  
PATENT DEPARTMENT, MS8260-1611  
EASTERN POINT ROAD  
GROTON, CT 06340

EXAMINER

LEE, JAE W

ART UNIT	PAPER NUMBER
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1656

DATE MAILED: 11/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/688,167	<b>Applicant(s)</b> AMMIRATI ET AL.	
	<b>Examiner</b> Jae W. Lee	<b>Art Unit</b> 1656	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-20 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Status of the Application***

Claims 1-20 are pending in the application.

The Examiner noted that Figure 5 disclosing the atomic coordinates of the undecaprenyl pyrophosphate synthase is missing in the drawing together with Figure 4 in the instant application.

### ***Election/Restrictions***

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-9, drawn to a composition comprising a *Staphylococcus* undecaprenyl pyrophosphate synthase in crystalline form, classified in class 435, subclass 183.
- II. Claims 10-16, drawn to a method of identifying a potential ligand for an undecaprenyl pyrophosphate synthase, classified in class 702, subclass 27.
- III. Claims 17, 18 and 20, drawn to a machine-readable data storage medium, classified in class 345, subclass 419.
- IV. Claim 19, drawn to a computer-implemented tool for design of a drug, classified in class 702, subclass.
- V. Claim 20, drawn to a computer, classified in class 345, subclass 419.

For each of inventions I-V above, restriction to one of the following is also required under 35 USC 121. Therefore, election is required of one of inventions I-V and one of inventions (A)-(F).

- (A) farnesyl pyrophosphate
- (B) (S)-farnesyl thiopyrophosphate
- (C) isoprenyl pyrophosphate
- (D) isoprenyl pyrophosphate
- (E) magnesium ion
- (F) sulfate ion

This application contains claims directed to the following patentably distinct species: ligand binding site comprising amino acid residues selected from 33, 34, 36, 37, 46, 76, 84, 95, 96, 148, 201, 207, 209, 220 and 251. The species are independent or distinct because these inventions represent structurally different amino acid sequences. Therefore, where structural identity is required, such as for hybridization or expression, the different sequences have different effects. Claims 1-20 will be examined to the extent that elected species read on the claims.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 1-20 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim

is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The inventions are distinct, each from the other because of the following reasons:

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, the composition of Group I is neither made nor used by the method of Group II. One may argue that the structural coordinates of the composition that are used in the method of Group II are obtained from a crystal of Group I, however, even assuming *arguendo* one considered the crystal of Group I and the method of Group II to be related as product and process of use, the methods of Group II for identifying candidate agents and evaluating test agents can be practiced using standard *in vitro* assay techniques.

In addition, searching the inventions of Groups I - II together would impose a serious search burden on the examiner. In the instant case, the search of the

crystallization of undecaprenyl pyrophosphate synthase and the method of identifying a potential ligand for an undecaprenyl pyrophosphate synthase do not overlap in scope and are not coextensive, and thus would require separate patent and non-patent literature searches for each of Groups I and II.

Invention I and Inventions III, IV and V are unrelated. In the instant case, the composition of Group I, which is composed of amino acids that fold into a specific three-dimensional structure is structurally different product that is distinct from a machine-readable data storage medium, a computer-implemented tool, and a computer.

Inventions II and IV, and Invention III are unrelated. In the instant case, the machine-readable data storage medium can be used in a materially different process i.e. storage of word-processing document.

Inventions II and IV are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product. See MPEP § 806.05(h). In the instant case, the computer-implemented tool can be used in a materially different process i.e. defragmentation of the computer-implemented tool.

Inventions III and V are directed to related products. The related inventions are distinct if the (1) the inventions as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect; (2) the inventions do not overlap in scope, i.e., are mutually exclusive; and (3) the inventions as claimed are not obvious variants. See MPEP § 806.05(j). In the instant case, the computer has different design, mode of operation, function, or effect i.e. the computer can be operated to simulate molecular movements of protein over a course of time under varying temperature whereas a machine-readable data storage medium can not. Furthermore, the inventions as claimed do not encompass overlapping subject matter and there is nothing of record to show them to be obvious variants.

Invention V, and Inventions II, IV are unrelated. In the instant case, the computer can be used in a materially different process i.e. display of a family reunion photo.

Because these inventions are unrelated and distinct for the reasons given above, have acquired a separate status in the art as shown by their different classification, and the literature and sequence searches required for each of the Group is not required for another thereby presenting a search burden on the Examiner, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).



Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jae W. Lee whose telephone number is 571-272-9949. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathleen Kerr can be reached on 571-272-0931. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



  
Patent Examiner: Jae W. Lee, Ph.D.  
**RICHARD HUTSON, PH.D.**  
**PRIMARY EXAMINER**